

TABLE I. CHARACTERISTICS

PARAMETER	VALUE
Calibration Resistance at °C	125 Ohms or 500 Ohms
Resistance Tolerance	±1%
Resistance - Temperature Relationship	See Table II
Dissipation Constant	27 milliwatts, minimum
Thermal Time Constant	0.5 seconds, maximum
Operating Temperature Range	-260°C to + 500°C

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## NOTES:

1. Part marking shall be in accordance with CS506099.

Part Number Example.....ST11784 Y W R C 1250 F

Basic drawing number \_\_\_\_\_  
 \* Part Type \_\_\_\_\_  
 Element Type \_\_\_\_\_  
 Configuration \_\_\_\_\_  
 \*\* Calibration \_\_\_\_\_  
 Resistance (See CS506099) \_\_\_\_\_  
 Resistance Tolerance \_\_\_\_\_

- \* Y in Part type indicates engineering model sensors & thermistors (See CS506099)  
 \*\* Only calibration schedule C is available for this ST

2. Parts shall meet the requirements of Tables I and II.  
 3. Dimensions are in inches, unless otherwise specified.  
 4. As a minimum, each sensor shall be marked with the part serial number. In addition, a tag shall be placed in the package identifying the device with the JPL part number, the 0°C calibration resistance, the manufacturer's name and data code.  
 5. This drawing takes precedence over documents referenced herein.  
 6. Parts depicted on this drawing shall be in accordance with the procurement specification and as specified herein.  
 7. All measurements and calibration shall be made on the platinum leads within 0.260 inch of the sensor body.

REVISION: D		APPROVED BY: <u>R. L. Herin</u>	DATE: <u>3-16-93</u>
APPROVED SOURCE(S)			ONLY THE ITEM LISTED IN THE APPROVED SOURCE BLOCK AND IDENTIFIED BY VENDOR NAME, ADDRESS, AND PART NUMBER HAS BEN EVALUATED AND APPROVED BY THE JET PROPULSION LABORATORY OR ITS DELEGATED ALTERNATE. A SUBSTITUTE ITEM SHALL NOT BE USED WITHOUT PRIOR EVALUATION AND APPROVAL BY JPL OR ITS DELEGATED ALTERNATE.
VENDOR PART NO.	VENDOR	JPL PART NO.	
SIMILAR TO: STYLE 118AKT (REFERENCE)	ROSEMOUNT INC. EAGAN, MINN. CAGE NO.: 60678	SEE NOTE 1	
JPL PROPULSION LABORATORY		CALIFORNIA INSTITUTE OF TECHNOLOGY	
CAGE NO. 23835			
Procurement specification: CS506099 Screening specification: ZPP-2073-GEN Custodian: Standards Group Design Section 356	TITLE: SENSOR, SURFACE TEMPERATURE, PLATINUM RESISTANCE, SQUARE, MINIATURE		STANDARD PART ST 11784 SHEET 1 OF 3

FILE: (Sec.514): F:\USERS\514\SPECS\ACT-DETL\ST11784.D

(Sec. 356):

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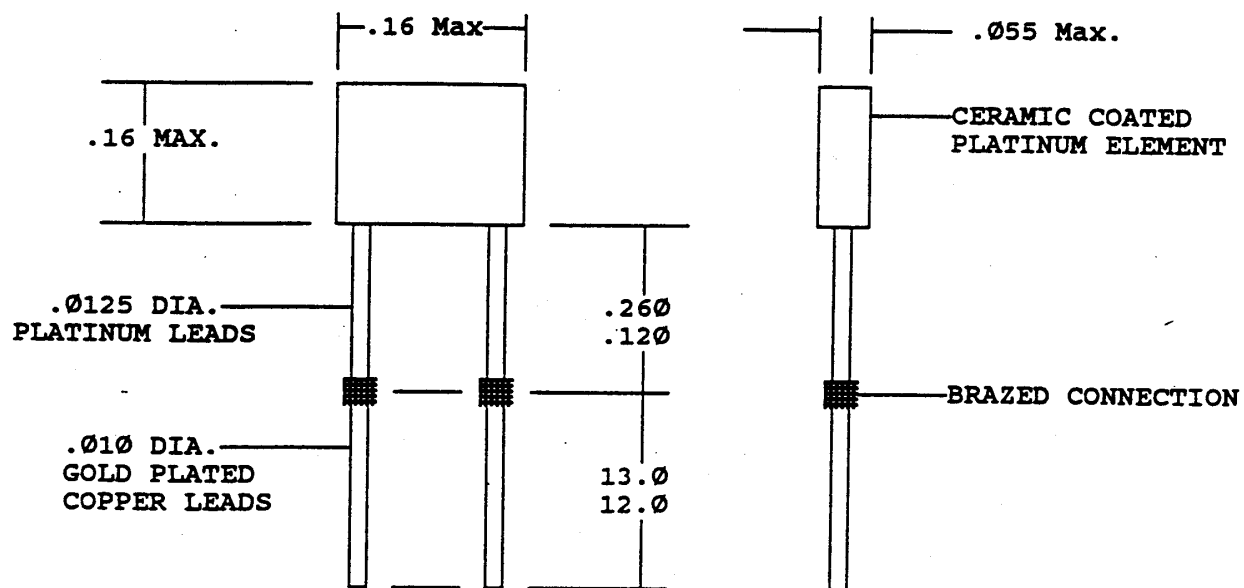


Figure 1. Outline/Dimensions.

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TABLE II RESISTANCE - TEMPERATURE CHARACTERISTICS

TEMPERATURE (°C)	RESISTANCE 125Ω	RESISTANCE 500Ω	TEMPERATURE (°C)	RESISTANCE 125Ω	RESISTANCE 500Ω
-260	0.29	1.15	40	144.75	579.00
-259	0.32	1.28	50	149.65	598.59
-258	0.36	1.43	60	154.57	618.13
-257	0.41	1.62	70	159.40	637.60
-256	0.46	1.85	80	164.25	657.01
-255	0.53	2.11	90	169.09	676.36
-254	0.61	2.42	100	173.91	695.65
-253	0.69	2.77	110	178.72	714.88
-252	0.80	3.18	120	183.51	734.05
-251	0.91	3.64	130	188.29	753.16
-250	1.04	4.15	140	193.05	772.21
-245	1.90	7.59	150	197.80	791.20
-240	3.13	12.53	160	202.53	810.12
-235	4.73	18.91	170	207.25	828.99
-230	6.63	26.51	180	211.95	847.80
-225	8.78	35.10	190	216.64	866.55
-220	11.11	44.46	200	221.31	885.24
-215	13.59	54.36	210	225.97	903.87
-210	16.16	64.65	220	230.61	922.44
-205	18.80	75.20	230	235.24	940.95
-200	21.84	85.91	240	239.85	959.40
-195	24.18	96.72	250	244.45	977.79
-190	26.89	107.57	260	249.03	996.13
-185	29.61	118.44	270	253.60	1014.40
-180	32.20	129.30	280	258.15	1032.61
-175	35.04	140.14	290	262.69	1050.77
-170	37.61	150.41	300	267.22	1068.86
-160	42.98	171.91	310	271.73	1086.90
-150	48.31	193.24	320	276.22	1104.87
-140	53.61	214.42	330	280.70	1122.79
-130	58.87	235.45	340	285.16	1140.65
-120	64.09	256.35	350	289.61	1158.45
-110	69.29	277.13	360	294.05	1176.19
-100	74.45	297.81	370	298.47	1193.87
- 90	79.60	318.38	380	302.87	1211.49
- 80	84.72	338.87	390	307.26	1229.05
- 70	89.82	359.27	400	311.64	1246.55
- 60	94.90	379.59	410	316.00	1263.99
- 50	99.96	399.84	420	320.35	1281.37
- 40	105.00	420.01	430	324.68	1298.69
- 30	110.03	440.11	440	328.99	1315.95
- 20	115.04	460.14	450	333.29	1333.15
- 10	120.03	480.10	460	337.58	1350.29
0	125.00	500.00	470	341.85	1367.37
10	129.96	519.84	480	346.10	1384.39
20	134.91	539.62	490	350.34	1401.35
30	139.84	559.34	500	354.57	1418.25

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